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A REVIEW OF UNIVERSITY MANAGEMENT EDUCATION IN CANADA

Prepared by

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Institutional and Public Finance
Statistics Branch

February 21, 1978

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PREFACE

Earlier versions of this report were presented to various business school audiences, including the Council of Deans of Faculties of Management and Business Administration and the American Assembly of Collegiate Schools of Business.

This report has been developed in preparation for the forthcoming 1978 meeting of the Administrative Sciences Association of Canada, and the workshops of the Council of Deans for which a number of background reports have been prepared.*

The earlier versions have been expanded in this study, including many additional tables and updates, especially 1976-77 data. This background information may provide insights into the future development of university business education in Canada by relating past trends to the present.

* Among these: "Current Issues in University Business Education in Canada (1975-76 to 1977-78)" (by Max von Zur-Muehlen); "Canada Council and Administrative Studies: Funding Patterns in the Mid-1970's" (by Donald M. Caskie); "Business Faculty at Canadian Universities in the Mid-1970's" (by Donald M. Caskie, Alf Chaiton, and Max von Zur-Muehlen); and "Federal Public Service Employment of University Graduates Trained in Administrative Studies in the Mid-1970's" (by Donald M. Caskie).

Note of Acknowledgement

I wish to express my appreciation to Mrs. Christine Jolicoeur and Mrs. E. Kealey for typing and clerical assistance, as well as Don Caskie and Alf Chaiton for their research and editorial support.

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Introduction

In 1970 and 1971, two reports were published that provided a detailed description of business education in Canada during the sixties: "Guide to Business Education Programs at Canadian Universities" and "Business Education and Faculty at Canadian Universities"⁽¹⁾. The following discussion updates some of the information in these studies, particularly the statistical series for university enrolment, degrees granted, and socio-economic characteristics of the commerce and business administration faculty.⁽²⁾

CHAPTER I

Enrolment Trends in Commerce and Business Administration

Full-time undergraduate enrolment in commerce and business administration more than quadrupled in the last fifteen years, from 7,854 in 1962-63 to 32,376 in 1976-77. This trend has been particularly evident in the 1970's, especially if compared to total enrolment; between 1970-71 and 1976-77, full-time undergraduate enrolment increased by 57,517 whereas commerce enrolment grew by 15,629, or about 27% of the total increase. The proportion of business students to total enrolment increased from 6.1% to 9.7%. This was still

(1) Max von Zur-Muehlen, "Guide to Business Education Programs at Canadian Universities" (Ottawa: Department of Industry, Trade and Commerce, 1970), and Max von Zur-Muehlen, "Business Education and Faculty at Canadian Universities" (Ottawa: The Economic Council of Canada, 1971).

(2) Earlier drafts of this report were distributed under the title "University Business Education During the Sixties and Seventies".

considerably below the United States where about 15% of all full-time undergraduate students major in business subjects (Table 1).

Part-time undergraduate enrolment in business remained stable during the early 70's at more than 10,000 students, but increased to 21,628 in 1976-77. This represented 13.7% of total undergraduate enrolment, a substantial growth over the previous year (Table 2). Of particular significance is the growth in the business enrolment of females, increasing for full-time students from 8.4% in 1969-70 to 26.4% in 1976-77, and for part-time from 6.8% to 22.6% respectively (Table 3).

In most of the fifteen years (1962-63 to 1976-77) for which data are given by province, Quebec had the largest full-time and part-time undergraduate enrolment (Tables 4 and 5).

Enrolment of full-time master's students in business administration rose from 1,538 in 1967-68 to 2,773 in 1976-77, less than was anticipated during the sixties, partly because some universities restricted the number of M.B.A. students. The proportion of full-time M.B.A. students in relation to total master's enrolment has been fairly steady since 1967-68 at between 10% to 12% (Table 6).

Table 1
Full-time Undergraduate Enrolment in
Commerce and Business Administration, 1962-63 to 1976-77

	Commerce & Business Administration	Total, Under- graduate Enrolment (all faculties)	Percentage of Commerce & Business Administration
1962-63	7,854	132,681	5.9
1963-64	8,787	146,827	6.0
1964-65	9,747	163,802	6.0
1965-66	10,740	187,049	5.7
1966-67	12,232	210,618	5.8
1967-68	13,381	229,299	5.8
1968-69	14,982	239,723	6.2
1969-70	16,117	263,915	6.1
1970-71	16,747	276,297	6.1
1971-72	20,189	287,718	7.0
1972-73	22,266	284,897	7.8
1973-74	25,177	294,976	8.5
1974-75	27,091	309,541	8.8
1975-76	29,970	330,954	9.0
1976-77	32,376	333,814	9.7

Table 2
Part-time Undergraduate Enrolment
in Commerce and Business Administration, 1962-63 to 1976-77*

	Commerce & Business Administration	Total, Under- graduate Enrolment (all faculties)	Percentage of Commerce & Business Administration
1962-63	5,666	38,639	14.7
1963-64	6,872	50,427	13.6
1964-65	7,074	56,481	12.5
1965-66	6,951	65,299	10.6
1966-67	8,639	74,678	11.6
1967-68	8,684	87,168	10.0
1968-69	9,147	91,182	10.0
1969-70	12,075	108,287	11.2
1970-71	10,555	142,206	7.4
1971-72	10,524	137,358	7.7
1972-73	11,446	132,500	8.6
1973-74	10,516	137,654	7.6
1974-75	13,336	145,789	9.1
1975-76	20,854	158,294	13.2
1976-77	21,628	157,766	13.7

*Includes only part-time students who were enrolled in "credit" courses, not those in continuing education programs.

Table 3

Percentage of Female Commerce and Business Administration
Undergraduates and Degrees Granted, 1962-63 to
1976-77

	Full-time Undergraduate	Part-time Undergraduate	Bachelor's Degree Granted
1962-63	6.5	6.1	4.1
1963-64	6.1	4.7	4.5
1964-65	6.8	6.5	3.2
1965-66	7.5	5.7	3.2
1966-67	7.8	6.8	4.7
1967-68	8.4	5.0	4.6
1968-69	8.2	6.0	6.9
1969-70	8.4	6.8	7.7
1970-71	10.2	8.5	7.0
1971-72	13.9	10.4	8.7
1972-73	16.1	16.8	9.3
1973-74	18.1	18.4	16.1
1974-75	19.9	19.5	16.7
1975-76	22.3	21.0	18.6
1976-77	26.4	22.6	N/A

Table 4

Full-time Undergraduate Commerce and Business Administration Enrolment by Province, 1962-63 to 1976-77

Province	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Newfoundland	2	33	100	255	339	400	396	381
Prince Edward Island	42	70	62	76	97	159	203	234
Nova Scotia	826	811	886	975	1,046	1,217	1,406	1,449
New Brunswick	434	517	583	613	729	874	916	981
Québec	2,900	3,227	3,482	3,643	3,961	4,266	4,731	5,204
Ontario	1,818	1,986	2,169	2,398	2,868	3,114	3,430	3,573
Manitoba	195	227	289	373	408	433	476	525
Saskatchewan	501	574	618	687	738	684	978	1,114
Alberta	507	655	765	813	1,013	1,106	1,400	1,637
British Columbia	631	637	793	907	1,033	1,128	1,046	1,019
Total	7,854	8,787	9,747	10,740	12,232	13,381	14,982	16,117
Province	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	
Newfoundland	461	464	538	546	594	519	477	
Prince Edward Island	261	274	228	220	246	303	356	
Nova Scotia	1,678	1,912	2,024	2,183	2,423	2,454	3,009	
New Brunswick	1,062	1,115	1,057	1,149	1,222	1,404	1,611	
Québec	4,961	5,465	6,506	7,366	7,804	9,340	10,014	
Ontario	3,715	5,965	6,291	7,470	8,019	8,569	9,331	
Manitoba	610	759	975	1,101	1,285	1,405	1,365	
Saskatchewan	1,177	1,251	1,161	1,269	1,361	1,502	1,496	
Alberta	1,803	2,018	2,185	2,401	2,709	2,986	2,866	
British Columbia	1,019	966	1,301	1,472	1,428	1,488	1,851	
Total	16,747	20,189	22,266	25,177	27,091	29,970	32,376	

Table 5

Part-time Undergraduate Commerce and Business Administration Enrolment by Province, 1962-63 to 1976-77

Province	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Newfoundland	-	-	-	-	-	-	22	63
Prince Edward Island	16	9	21	24	6	10	17	-
Nova Scotia	79	60	73	93	96	74	141	142
New Brunswick	78	23	47	70	89	70	102	345
Québec	4,087	5,507	5,609	5,753	7,150	6,819	7,346	9,901
Ontario	1,321	1,198	1,219	902	987	1,491	1,233	1,223
Manitoba	2	6	9	6	15	19	41	48
Saskatchewan	30	20	30	39	212	66	81	129
Alberta	38	39	46	39	53	99	115	173
British Columbia	15	10	20	25	31	36	49	51
Total	5,666	6,872	7,074	6,951	8,639	8,684	9,147	12,075

Province	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Newfoundland	82	22	46	55	30	101	123
Prince Edward Island	106	96	30	32	18	182	104
Nova Scotia	227	206	277	321	446	529	604
New Brunswick	166	181	349	557	648	437	372
Québec	7,807	7,738	8,880	6,814	8,877	15,593	15,500
Ontario	1,739	1,981	1,299	2,059	2,470	3,092	3,330
Manitoba	73	51	86	133	144	154	192
Saskatchewan	199	53	115	134	332	361	787
Alberta	117	151	244	252	308	306	291
British Columbia	39	45	120	159	63	99	325
Total	10,555	10,524	11,446	10,516	13,336	20,854	21,628

Table 6
Full- and Part-time Master's Enrolment
in Business Administration, 1967-68 to 1976-77

	Full-time			Part-time		
	Business Administration	All Disciplines	Percentage Business Administration	Business Administration	All Disciplines	Percentage Business Administration
1967-68	1,538	14,225	10.8	1,098	7,300	15.0
1968-69	1,634	15,695	10.4	1,416	8,121	17.4
1969-70	1,870	18,587	10.1	1,588	9,877	16.1
1970-71	2,081	18,950	11.0	1,407	11,081	12.7
1971-72	2,144	18,104	11.8	1,635	12,896	12.7
1972-73	2,189	19,423	11.3	1,594	14,010	11.4
1973-74	2,404	20,198	11.9	1,634	16,362	10.0
1974-75	2,615	21,925	11.9	2,031	17,225	11.8
1975-76	2,836	23,826	11.9	2,804	19,357	14.5
1976-77	2,773	24,152	11.5	2,933	20,004	14.7

Overall, the majority of full- and part-time M.B.A. students were enrolled in Ontario (Tables 7 and 8).

Full-time and part-time doctoral enrolment in business went from 64 in 1970-71 to 121 in 1976-77. Meanwhile, total doctoral enrolment remained constant at about 13,000. Therefore, the percentage of doctoral students in business grew from 0.5% to 0.9%⁽³⁾ (Table 9). The majority of doctoral students in business subjects were studying in Ontario (Table 10).

The Canada Council has provided substantial financial support to doctoral students in business administration at Canadian universities and abroad⁽⁴⁾. In 1969-70, 59 fellowships were awarded, 2.4% of all Canada Council awards that year. The percentage declined from a high of 2.8% (68 awards) in 1971-72 to 1.4 (21) in 1976-77. The decline of doctoral fellowships in business administration is partially explained by a decrease in the success ratio of applicants from 38.8% in 1969-70 to 26.5% in 1974-75, but it increased again to 35.0% in 1976-77. But whereas only a quarter of the doctoral award holders attended Canadian universities in 1970-71, the percentage increased to half by the mid-70's (Table 11).

Table 12 show the legal status of full-time business students by level of study and in comparison to total student population. At the undergraduate

(3) About 1,000 undergraduates, 200 master's students, and 75 doctoral students studying business subjects in the United States are excluded.

(4) In addition, the Bronfman Foundation has awarded a number of doctoral fellowships each year.

Table 7

Full-time Master's Enrolment in Business Administration by Province, 1962-63 to 1976-77

	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Nova Scotia	-	-	-	-	-	13	25	35
New Brunswick	-	9	4	3	7	8	7	-
Québec	238	377	408	451	477	571	433	412
Ontario	314	332	411	483	614	794	970	1,123
Manitoba	-	-	-	-	-	-	29	67
Saskatchewan	-	13	16	15	7	29	35	35
Alberta	-	-	13	23	34	19	53	61
British Columbia	21	31	28	41	88	104	82	137
Total	573	762	880	1,016	1,227	1,538	1,634	1,870

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Nova Scotia	46	49	37	52	90	127	178
New Brunswick	-	13	31	40	31	37	30
Québec	475	531	650	575	812	751	667
Ontario	1,084	1,052	976	1,213	1,158	1,370	1,387
Manitoba	39	48	44	69	68	83	91
Saskatchewan	26	24	21	20	19	23	38
Alberta	53	65	66	67	55	68	70
British Columbia	358	362	364	368	382	377	312
Total	2,081	2,144	2,189	2,404	2,615	2,836	2,773

Table 8

Part-time Master's Enrolment in Business Administration by Province, 1962-63 to 1976-77

Province	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Nova Scotia	-	-	-	-	-	37	48	55
New Brunswick	-	-	-	-	1	-	2	-
Québec	750	1,088	793	832	791	3	60	111
Ontario	269	346	387	435	736	974	1,198	1,300
Manitoba	-	-	-	-	-	-	17	39
Saskatchewan	-	-	1	5	14	33	23	26
Alberta	-	-	1	5	16	24	25	28
British Columbia	4	6	8	15	23	27	43	29
Total	1,023	1,440	1,190	1,292	1,581	1,098	1,416	1,588

Province	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Nova Scotia	42	38	41	46	72	117	178
New Brunswick	-	6	339	158	609	804	30
Québec	235	268	1,098	1,227	1,163	1,511	667
Ontario	1,024	1,187	1,227	1,227	1,163	1,387	91
Manitoba	32	62	116	203	187	372	38
Saskatchewan	37	31	116	203	187	372	70
Alberta	24	31	116	203	187	372	312
British Columbia	13	12	1,594	1,634	2,031	2,804	2,773
Total	1,407	1,635	1,594	1,634	2,031	2,804	2,773

Table 9
Full-and Part-time Doctoral Enrolment in
Business Administration, 1970-71 to 1976-77

	Business Administration	All Disciplines	Percentage Business Administration
1970-71	64	12,814	0.5
1971-72	85	13,268	0.6
1972-73	104	13,424	0.8
1973-74	103	12,172	0.8
1974-75	110	13,110	0.8
1975-76	115	13,182	0.8
1976-77	121	13,260	0.9

Table 10

Full-and Part-time Doctoral Enrolment in Business
Administration by Province, 1970-71 to 1976-77

	<u>Québec</u>		<u>Ontario</u>		<u>British Columbia</u>		Total
	No.	Percent	No.	Percent	No.	Percent	
1970-71	6	9.4	41	64.1	17	26.5	64
1971-72	8	9.4	46	54.1	31	36.5	85
1972-73	11	10.6	58	55.8	35	33.6	104
1973-74	17	16.5	57	55.3	29	28.2	103
1974-75	25	22.7	59	53.6	26	23.6	110
1975-76	27	22.8	63	55.3	25	21.9	115
1976-77	30	24.8	64	52.9	27	22.3	121

Table 11

Canada Council Doctoral Fellowship Holders
in Business Administration, 1969-70 to 1976-77

In Business Administration	Success ratio of applicants (in per cent)	Percent attending Canadian universities	Total number of doctoral fellowships	Percentage in Business Administration
1969-70 59	38.8	—	2,368	2.4
1970-71 64	30.1	25.0	2,456	2.5
1971-72 68	29.0	30.0	2,395	2.8
1972-73 47	39.0	29.0	1,955	2.4
1973-74 36	35.1	42.2	1,722	2.1
1974-75 29	26.5	48.2	1,523	1.9
1975-76 21	32.3	50.0	1,387	1.5
1976-77 21	35.0	50.0	1,340	1.4

Source: "The Doctoral Fellowship Program of the Canada Council in Review", unpublished document, by Max von Zur-Muehlen, 1976, and Annual Reports of the Canada Council.

Table 12

Legal Status of Full-time Business Students
by Level of Study, 1976-77 *

<u>Legal Status</u>	<u>Undergraduate</u>	<u>Masters</u> (in percent)	<u>Doctorate</u>
<u>Canadian Citizen</u>			
Business Students	88.4	76.9	48.4
All Students	89.6	73.0	55.1
<u>Landed Immigrant</u>			
Business Students	5.4	9.8	19.8
All Students	5.7	11.4	23.4
<u>Foreign Students</u>			
Business Students	6.2	13.3	31.9
All Students	4.7	15.6	21.5
Total Business	100.0	100.0	100.0
All Students	100.0	100.0	100.0

* Estimated from 85% of total full-time enrolment at Canadian universities

level, 6.2% of the business students were foreign visa holders as compared with 4.7% of the total; for master's students it was 13.3% and 15.6% respectively; whereas at the doctoral level, this percentage was 31.9% for business students and 21.5% for all full-time doctoral students.

CHAPTER II

Business Degree Granted

The number of undergraduate degrees in business administration increased by more than five-fold from 1,143 in 1961-62 to 5,983 in 1975-76 but represented only about 7.2% of all degrees granted in that year (Table 13). This might indicate a higher withdrawal rate, and also reflects the fact that most Canadian business programs are at the honour's level, one year longer than a general bachelor's degree.

The annual output of bachelor's degrees, by province, is given for a 15 year period in Table 14, with the percentage distribution in Table 15. Quebec clearly dominates at this level.

Canadian universities awarded 979 M.B.A.'s in 1968-69. Annual output gradually increased to 1,616 in 1975-76, accounting for 14.0 of all master's degrees awarded that year (Table 16). Table 17 shows that over 50% of M.B.A.'s have been awarded in Ontario.

Since the creation of doctoral business administration programs in the sixties, Canadian universities have awarded a total of 63 Ph.D.'s (until 1975-76). During the sixties one degree was granted a year; only in 1972-73 did the

Table 13
Bachelor's and First Professional Degrees
in Commerce and Business Administration, 1961-62 to 1975-76

	Commerce & Business Administration	Total, all Disciplines	Percentage of Commerce & Business Administration
1-62	1,143	22,836	5.0
2-63	1,238	24,939	5.0
3-64	1,468	28,735	5.1
4-65	1,678	33,055	5.1
5-66	1,831	37,858	4.8
6-67	1,870	43,227	4.3
7-68	2,279	48,787	4.7
8-69	2,386	54,695	4.4
9-70	2,949	60,453	4.9
0-71	3,345	67,100	5.0
1-72	3,656	72,564	5.0
2-73	3,965	70,696	5.6
3-74	4,604	74,851	6.2
4-75	5,665	80,737	7.0
5-76	5,983	83,276	7.2

Table 14

Bachelor's Degrees in Commerce and Business Administration by Province, 1961-62 to 1975-76

Province	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
Newfoundland	12	3	6	9	16	32	49
Prince Edward Island	6	7	4	4	9	4	10
Nova Scotia	82	103	116	138	154	142	155
New Brunswick	43	56	63	80	89	86	116
Québec	485	501	610	714	803	667	912
Ontario	280	293	324	347	347	417	424
Manitoba	30	40	46	62	53	85	126
Saskatchewan	37	53	82	89	87	116	117
Alberta	58	31	98	99	135	151	159
British Columbia	110	151	119	136	138	170	211
Total	1,143	1,238	1,468	1,678	1,831	1,870	2,279

Province	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Newfoundland	51	26	55	38	51	66	81	59
Prince Edward Island	19	27	40	51	48	45	45	48
Nova Scotia	238	324	359	366	428	470	467	514
New Brunswick	100	128	185	188	184	250	184	238
Québec	960	1,149	1,327	1,405	1,296	1,721	1,993	2,166
Ontario	418	655	614	809	1,009	1,047	1,781	1,612
Manitoba	56	78	117	124	151	173	225	263
Saskatchewan	127	145	173	185	210	258	168	258
British Columbia	201	219	254	306	368	343	469	543
Total	216	198	221	184	220	254	252	282
	2,386	2,949	3,345	3,656	3,965	4,604	5,665	5,983

Table 15

Percentage Distribution of
Bachelor's Degrees in Commerce and Business Administration by Province, 1961-62 to 1975-76

Province	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68
Newfoundland	1.1	0.2	0.4	0.5	0.9	1.7	2.1
Prince Edward Island	0.5	0.6	0.3	0.2	0.5	0.2	0.4
Nova Scotia	7.2	8.3	7.9	8.2	8.4	7.6	6.8
New Brunswick	3.8	4.5	4.3	4.8	4.9	4.6	5.1
Québec	42.4	40.5	41.6	42.6	43.9	35.7	40.0
Ontario	24.5	23.7	22.1	20.7	19.0	22.3	18.6
Manitoba	2.6	3.2	3.1	3.7	2.9	4.6	5.5
Saskatchewan	3.2	4.3	5.6	5.3	4.8	6.2	5.1
Alberta	5.1	2.5	6.7	5.9	7.4	8.1	7.0
British Columbia	9.6	12.2	8.1	8.1	7.5	9.1	9.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Province	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Newfoundland	2.1	0.9	1.6	1.0	1.3	1.4	1.4	1.0
Prince Edward Island	0.8	0.9	1.2	1.4	1.2	1.0	0.8	0.8
Nova Scotia	10.0	11.0	10.7	10.0	10.8	10.2	8.2	8.6
New Brunswick	4.2	4.3	5.5	5.1	4.6	5.4	3.2	4.0
Québec	40.2	39.0	39.7	38.4	32.7	37.4	35.2	36.2
Ontario	17.5	22.2	18.4	22.1	25.5	22.7	31.4	26.9
Manitoba	2.4	2.6	3.5	3.4	3.8	3.8	4.0	4.4
Saskatchewan	5.3	4.9	5.2	5.1	5.3	5.1	3.0	4.3
Alberta	8.4	7.4	7.6	8.4	9.3	7.5	8.3	9.1
British Columbia	9.1	6.7	6.6	5.0	5.6	5.5	4.5	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 16
Master's Degrees Awarded in Business Administration, 1968-69 to 1975-76

	Business Administration	Total, all Disciplines	Percentage Business Administration
1968-69	979	7,035	13.9
1969-70	971	8,461	11.5
1970-71	1,026	9,638	10.6
1971-72	1,135	10,258	11.1
1972-73	1,234	10,629	11.6
1973-74	1,275	10,310	12.6
1974-75	1,633	11,068	14.8
1975-76	1,616	11,555	14.0

Table 17
Master's Degrees Granted in Business Administration by Province,
1969-70 to 1975-76

Province	1969-70		1970-71		1971-72		1972-73		1973-74	
	No.	%	No.	%	No.	%	No.	%	No.	%
Nova Scotia ..	12	1.2	23	2.1	21	1.8	21	1.7	18	1.4
New Brunswick	1	0.1	-	-	-	-	12	1.0	20	1.6
Quebec	233	24.0	180	16.5	252	22.2	279	22.6	285	22.3
Ontario	615	63.3	708	64.8	641	56.5	675	54.7	746	58.5
Manitoba	17	1.8	22	2.0	13	1.1	21	1.7	35	2.7
Saskatchewan .	9	0.9	11	1.0	28	2.5	15	1.2	15	1.2
Alberta	19	2.0	49	4.5	58	5.1	69	5.6	57	4.5
British Columbia ...	65	6.7	99	9.1	122	10.8	142	11.5	99	7.8
Total	971	100.0	1,092	100.0	1,135	100.0	1,234	100.0	1,275	100.0

Province	1974-75		1975-76	
	No.	%	No.	%
Nova Scotia ..	39	2.4	56	3.5
New Brunswick	11	0.7	18	1.1
Quebec	373	22.8	377	23.3
Ontario	986	60.4	942	58.3
Manitoba	26	1.6	35	2.1
Saskatchewan .	13	0.8	14	0.9
Alberta	67	4.1	48	3.0
British Columbia ...	118	7.2	126	7.8
Total	1,633	100.0	1,616	100.0

annual number reach 10 and grew to 19 in 1974-75, but declined to 12 in 1975-76 (Table 18). Most of them were obtained from Ontario universities. During the eight years from 1968-69 to 1975-76, only five doctoral degrees were awarded in Quebec (Table 19).

It has been projected that in the near future Canadian universities will award 20 to 25 Ph.D.'s each year, in addition 12 to 15 Canadians will obtain business doctorates in the United States.

A comparison of the number of degrees granted in Canada and the United States reveals that at American universities, business degrees, except for the master's, constituted a larger proportion of the total. Around 15% of American bachelor's degrees were in business, compared with 7% in Canada. At the master's level, the proportions are nearly equal at 12%. However, the difference is particularly marked at the doctoral level where in recent years U.S. universities have awarded annually about 3% of all degrees in business, whereas the proportion in Canada has been a fraction of one percent (Table 20).

There have been some shifts among the provinces and growth patterns differ. In view of the rise in enrolment over the last few years, a further increase in the number of degrees granted for all levels is likely.

Table 18
Doctoral Degrees Awarded in Business Administration,
1968-69 to 1975-76

	Business Administration	Total, all Disciplines	Percentage Business Administration
1968-69	1	1,108	0.1
1969-70	1	1,375	0.1
1970-71	4	1,625	0.2
1971-72	6	1,724	0.3
1972-73	10	1,929	0.5
1973-74	10	1,940	0.6
1974-75	19	1,840	1.0
1975-76	12	1,693	0.7

Table 19

Doctoral Degrees Granted in Business Administration by Province,
1968-69 to 1975-76

	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Quebec	-	1	-	-	-	1	1	2
Ontario	1	-	4	6	9	7	11	7
British Columbia ..	-	-	-	-	1	2	7	3
Total	1	1	4	6	10	10	19	12

Table 20
Degrees Granted in Business Subjects at United States Universities
1961-62 to 1974-75

	Bachelor	Percent of Total	Masters	Percent of Total	Doctorate	Percent of Total
1961-62	52,139	13.4	5,401	6.1	232	2.0
1962-63	54,036	13.0	5,938	6.2	258	2.0
1963-64	59,198	12.7	6,513	6.2	281	1.9
1964-65	63,055	12.6	7,690	6.6	329	2.0
1965-66	63,639	12.2	13,142	9.4	402	2.2
1966-67	70,011	12.5	15,110	9.6	454	2.2
1967-68	80,592	12.8	18,101	10.2	460	2.0
1968-69	94,533	13.0	19,612	10.1	546	2.1
1969-70	106,054	13.4	21,599	10.4	622	2.1
1970-71	115,527	13.8	26,544	11.5	810	2.5
1971-72	121,830	14.8	29,960	12.0	900	2.7
1972-73	132,330	13.9	30,230	11.8	1,010	3.0
1973-74	135,360	13.9	31,370	11.6	1,120	3.3
1974-75	133,822	14.5	36,364	12.4	1,011	3.0

Sources: United States Department of Health, Education and Welfare, Projections of Educational Statistics to 1983-84, (1974 Edition), and National Center of Education Statistics, Digest of Education Statistics, (1976 Edition).

CHAPTER III

Highly Qualified Manpower Educated in Business

It is of interest to relate the flow information, such as the number of business degrees granted by level, to the stock data of the number of business graduates in Canada at a specific date.

According to the Highly Qualified Manpower (HQM) Survey of 1973 there were 630,565 university degree-holders in Canada (Table 21). Of these, 45,635 or 7.2% were business graduates (including 10,620 graduates in accounting). More than 33,000 had bachelor's degrees; about 10,000 master's degrees, and 245 doctorates. Many master's degrees and the majority of the Ph.D.'s were obtained in the United States. Since 1973, when the HQM survey was conducted, Canadian universities have annually produced about 5,000 undergraduate degrees in commerce and business administration, 1,500 M.B.A.'s, and about 12 Ph.D.'s. A similar growth pattern can be expected for the next few years, based on current undergraduate and graduate enrolment trends.⁽⁶⁾ In addition, each year Canadians obtained 100 M.B.A. degrees and 15 to 20 Ph.D.'s in the United States.⁽⁷⁾

(6) An unknown percentage of business graduates have been foreign students who left Canada after graduation. In addition, some Canadians and landed immigrants accept appointments abroad.

(7) Since there is no precise information available, these figures are estimates by the author on the basis of past trends.

Table 21

Comparison between Business Degrees and the Total Number
of Degrees Awarded by Level, 1973

	Commerce, Management, Administration	Accounting	Sub-Total Business	%	All Disciplines	%
General Degree	13,320	4,775	18,095	11.8	53,250	88.2
Specialized Under- graduate Degree	10,325	4,740	15,065	5.2	289,580	94.8
Diploma or Certif- icate (Post-bachelor)	1,665	110	1,775	8.0	22,135	92.0
Diploma Certificate .. (Graduate)	205	140	345	4.7	7,265	95.3
Master Degree	9,280	825	10,105	10.8	93,720	89.2
Doctorate	215	30	245	0.9	27,410	99.1
Total	35,015*	10,620	45,635*	7.2	630,565**	92.8

* Total do not add due to random rounding.

**Total includes the first professional degree in medicine.

The 45,635 business graduates were unevenly distributed among the provinces. For example, 73.4% of all degree-holders were in Quebec and Ontario, and 84.6% of the master's, although the two provinces represent only 63.6% of the total population (Table 22).

Tables 23 and 24 provide the age distribution and the years the degrees were obtained of graduates, by level and by sex. At the bachelor's level, there were 3,115 female graduates, in contrast to 31,170 males. At the master's level there were only 360 females, compared with 10,180 males. The Highly Qualified Manpower Survey of 1973 did not identify a single female Ph.D. in business administration. In contrast, the female proportion of full-time undergraduate enrolment in business subjects has more than quadrupled from around 6% during the early sixties to 26% in 1975-76, and the same trend existed for business degrees granted.

The year of graduation for all business graduates shows that 62.0% had obtained their degrees between 1960 and the early seventies. At the master's level, the percentage was 80.5% and for the doctoral 87.3% (Table 25).

In relating the flow information of the number of business degrees granted with the stock data of the Highly Qualified Manpower Survey of 1973, there are indications that the percentage of business graduates will continue to expand in the Canadian labour force. One reason for this trend is the

Table 22

Type of Business Degrees by Province, 1973

	General Degree		Specialized Undergraduate Degree		Diploma or Certificate Post-Bachelor		Diploma or Certificate Graduate		Master's Degree		Earned Doctorate		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Newfoundland	210	1.2	90	0.6	-	-	-	-	20	0.2	-	-	320	0.7
Prince Edward Island	60	0.3	35	0.2	-	-	-	-	5	0.0	-	-	100	0.2
Nova Scotia	610	3.4	215	1.4	5	0.3	-	-	150	1.5	10	4.3	990	2.2
New Brunswick	380	2.1	210	1.4	20	1.1	10	2.8	65	0.6	-	-	685	1.5
Quebec	4,635	25.6	6,565	43.6	730	41.2	235	66.2	3,655	36.2	70	29.8	15,890	34.8
Ontario	5,930	32.8	5,805	38.5	840	47.5	75	21.1	4,895	48.4	85	36.2	17,630	38.6
Manitoba	495	2.7	320	2.1	30	1.7	-	-	200	2.0	-	-	1,045	2.3
Saskatchewan	530	2.9	240	1.6	35	2.0	5	1.4	85	0.8	10	4.3	905	2.0
Alberta	2,080	11.5	630	4.2	65	3.7	15	4.2	400	4.0	20	8.5	3,210	7.0
British Columbia ...	3,150	17.4	955	6.3	45	2.5	15	4.2	630	6.2	40	17.0	4,835	10.6
Yukon and Northwest Territories	20	0.1	-	-	-	-	-	-	5	0.0	-	-	25	0.1
Total	18,100	100.0	15,065	100.0	1,770	100.0	355	100.0	10,110	100.0	235	100.0	45,635	100.0

Table 23

Year of Birth of Female Business Graduates by Type of Degree in 1973

Year of Birth	General Degree		Specialized Undergraduate		Master's		Total	
	No.	%	No.	%	No.	%	No.	%
Before 1920	215	10.7	180	16.3	80	22.2	475	13.7
1920-29	425	21.1	125	11.3	90	25.0	640	18.4
1930-34	215	10.7	95	8.6	45	12.5	355	10.2
1935-39	170	8.5	150	13.6	30	8.3	350	10.1
1940-44	405	20.1	210	19.0	50	13.9	665	19.1
1945-49	555	27.6	335	30.3	65	18.1	955	27.5
After 1950	25	1.2	10	0.9	0	0.0	35	1.0
Total	2,010	100.0	1,105	100.1	360	100.0	3,475	100.1

Table 24

Year of **Birth** of Male Business Graduates by Type of Degree in 1973

Year of Birth	General Degree		Specialized Undergraduate		Master's		Doctorate		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Before 1920	1,700	10.1	2,040	14.3	425	4.2	25	9.1	4,190	10.1
1920-29	3,605	21.4	2,360	16.5	1,300	12.8	60	21.8	7,325	17.6
1930-34	1,940	11.5	1,655	11.6	1,360	13.4	80	29.1	5,035	12.1
1935-39	2,595	15.4	1,880	13.1	2,070	20.3	55	20.0	6,600	15.9
1940-44	3,270	19.4	2,685	18.8	2,785	27.4	55	20.0	8,795	21.1
1945-49	3,605	21.4	3,635	25.4	2,095	20.6	0	0.0	9,335	22.4
After 1950	145	0.9	55	0.4	145	1.4	0	0.0	345	0.8
Total	16,860	100.0	14,310	100.0	10,180	100.0	275	100.0	41,625	100.0

Table 25

Year of Completion of Highest Earned Degree of Business Graduates, 1973

Year of Completion	General Degree		Specialized Undergraduate		Master's		Doctorate		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Before 1945	1,900	10.1	1,975	12.8	185	1.8	5	1.8	4,065	9
1945-49	1,840	9.8	1,295	8.4	290	2.8	5	1.8	3,430	7
1950-54	2,295	12.2	1,515	9.8	560	5.3	15	5.5	4,385	9
1955-59	2,400	12.8	1,770	11.5	1,020	9.7	10	3.6	5,200	11
1960-64	2,800	14.9	1,985	12.9	1,540	14.6	45	16.4	6,370	14
1965-69	4,850	25.5	3,560	23.1	2,935	27.8	105	38.2	11,405	25
After 1970	2,810	14.9	3,285	21.4	4,015	38.1	90	32.7	10,200	22
Total	18,850	100.0	15,385	100.0	10,545	100.0	275	100.0	45,055	100

documental evidence that the average income of commerce and business administration graduates, both at the bachelor's and master's level, has been consistently above the average annual employment income for other disciplines, and that this pattern is likely to continue (Table 26).

Table 26

Male Income Differentials Between Degree Levels for Business Administration
and Selected Disciplines, Canada, 1973 #

Discipline	AVERAGE ANNUAL EMPLOYMENT INCOME (\$)				PERCENTAGES					
	Undergraduate Degree		Graduate Degree		As % of General Undergraduate Degree			As % of Specialized Undergraduate Degree		As % of Masters Degree
	General	Specialized	Masters	Doctoral	Specialized Undergraduate	Masters	Doctoral	Masters	Doctoral	
Business Administration	17,100	18,600	20,800	28,800	109	122	168	112	155	138
Chemistry	13,830	15,700	15,700	19,500	114	114	141	100	124	124
Economics	15,000	18,600	19,500	24,500	124	130	163	105	132	126
Engineering	..	18,800	17,900	20,200	-	-	-	96	109	113
English	12,700	16,000	14,800	18,300	126	117	144	93	114	124
History	13,000	13,900	15,200	17,900	107	117	138	109	129	118
Sociology	12,200	12,700	14,800	19,400	104	121	159	117	153	131

Persons who worked 40 - 52 weeks in last 12 months; degree is last highest earned degree

.. Too few respondents to permit release of data

Source: Statistics Canada, in conjunction with Ministry of State for Science and Technology, Post-Censal Highly Qualified Manpower Survey, 1973, Table 30.

CHAPTER IV

Socio-Economic Characteristics of Business Faculty

The number of teachers in commerce and business administration has increased thirteen fold compared with a six fold increase in all other disciplines between 1956-57 to 1974-75. Business faculties grew from 107 to 1,374 full-time teachers. In percentage terms, they accounted for 2.2% of all teachers in 1956-57, and 4.4% in 1976-77 (Table 27). For many years the annual increase was between 10% and 20%. This trend continued during the seventies, although growth in most other disciplines was modest (Table 28). Growth of business faculties, in relation to other disciplines, can be expressed as an index using 1967 as a base of 100. By 1976-77 the index has risen to 273.7 compared with 188.3 for the others (Table 29).

Table 30 shows the breakdown of the business faculty by teaching specialization within the business discipline for 1975-76. The proportion of accounting faculty specified was 12.8%, and finance and banking represented 5.8%. The majority of full-time university teachers were involved in teaching general commerce, management and business administration, although the specific courses might be in other specializations.

For 1976-77 the business faculty was identified for 36 universities and related to total full-time university teachers in those institutions. There were a sizeable number of business schools which had more

Table 27
Number of Full-time University Teachers
in Commerce and Business Administration, 1956-57 to 1976-77

	Commerce & Business Administration	Percentage in Commerce and Business Adm.	Total, all Disciplines
1956-57	107	2.2	4,973
1957-58	126	2.5	5,148
1958-59	146	2.7	5,325
1959-60	154	2.6	5,889
1960-61	161	2.5	6,454
1961-62	177	2.4	7,172
1962-63	192	2.4	7,890
1963-64	236	2.6	9,125
1964-65	283	2.7	10,605
1965-66	331	2.7	12,085
1966-67	417	2.9	14,392
1967-68	502	3.0	16,703
1968-69	607	3.2	18,864
1969-70	685	3.1	21,839
1970-71	712	2.9	24,604
1971-72	923	3.4	26,963
1972-73	952	3.4	27,870
1973-74	1,051	3.7	28,539
1974-75*.....	1,227	4.1	29,710
1975-76	1,273	4.1	30,784
1976-77	1,374	4.4	31,460

*Includes for the first time university teachers from Ryerson Polytechnical Institute.

Table 28
Annual Percentage Change of Full-time University Teachers in
Commerce and Business Administration, 1957-58 to 1976-77

	Commerce and Business Administration	All Disciplines
1957-58	15.1	3.4
1958-59	13.7	3.3
1959-60	5.2	9.6
1960-61	4.4	8.8
1961-62	9.0	10.0
1962-63	7.8	9.1
1963-64	18.7	13.5
1964-65	16.6	14.0
1965-66	14.5	12.3
1966-67	20.6	16.1
1967-68	16.9	13.8
1968-69	17.3	11.5
1969-70	11.4	13.6
1970-71	3.8	11.2
1971-72	22.9	8.8
1972-73	3.1	3.3
1973-74	9.4	2.4
1974-75	14.4	4.0
1975-76	3.6	3.5
1976-77	7.4	2.2

Table 29
Index of Full-time
University Teachers in Commerce and
Business Administration, 1956-57 to 1976-77*

	Commerce & Business Administration	All Disciplines
1956-57	21.3	29.8
1957-58	25.1	30.8
1958-59	29.1	31.9
1959-60	30.7	35.3
1960-61	32.1	38.6
1961-62	35.1	42.9
1962-63	38.3	47.2
1963-64	47.0	54.6
1964-65	56.4	63.5
1965-66	65.9	72.3
1966-67	83.1	86.2
1967-68	100.0	100.0
1968-69	120.9	112.9
1969-70	136.5	130.7
1970-71	141.8	147.3
1971-72	183.9	161.4
1972-73	189.6	166.9
1973-74	209.4	170.9
1974-75	244.4	177.9
1975-76	253.6	184.3
1976-77	273.7	188.3

* 1967-68 = 100.0

Table 30

Business Faculty by Discipline,
1975-76

	Number	%
Commerce, Management and Business Administration	430	33.9
Business Administration	194	15.3
Commerce	32	2.5
Accounting	162	12.8
Finance and Banking	74	5.8
Industrial Relations	33	2.6
Management	34	2.7
Marketing and Retailing	40	3.2
Personnel Management	15	1.2
Secretarial Science	26	2.0
Other Commerce and Business Studies	228	18.0
Total	1,268	100.0

Table 31

Business Faculty in Relation to Total Full-time University
Teachers by University and Province, 1976-77

University and Province	Business Faculty	Total Full-time Faculty	Percentage Business Faculty
<u>Memorial</u>	<u>20</u>	<u>770</u>	<u>2.6</u>
<u>Prince Edward Island</u>	<u>8</u>	<u>114</u>	<u>7.0</u>
Acadia	12	187	6.4
Dalhousie	30	781	3.8
Mount St. Vincent (1)	14	95	14.7
St. Francis Xavier	11	158	7.0
St. Mary's (2)	27	173	15.6
<u>Sub-total, Nova Scotia</u>	<u>94</u>	<u>1,394</u>	<u>6.6</u>
Moncton	25	294	8.5
Mount Allison	6	129	4.7
New Brunswick	21	573	3.7
<u>Sub-total, New Brunswick</u>	<u>52</u>	<u>996</u>	<u>5.2</u>
Bishop's	6	67	9.0
Concordia	65	642	10.1
Ecole des Hautes Etudes Commerciales	90	1,596 (3)	5.6
Laval	52	1,340	3.9
McGill	39	1,252	3.1
Quebec (combined)	87	1,185	7.3
Sherbrooke	42	580	7.2
<u>Sub-total, Quebec</u>	<u>381</u>	<u>6,662</u>	<u>5.7</u>
Carleton	12	633	1.9
Lakehead	14	240	5.8
Laurentian	16	274	5.8
McMaster	37	823	4.5
Ottawa (4)	26	934	2.8
Queen's	41	886	4.6
Ryerson	107	640	16.7
Toronto	45	2,328	1.9
Western	72	1,291	5.6
Wilfrid Laurier (2)	29	206	14.1
Windsor	29	503	5.8
York (4)	40	1,037	3.8
<u>Sub-total, Ontario</u>	<u>468</u>	<u>9,795</u>	<u>4.8</u>

Table 31 (cont'd)

University and Province	Business Faculty	Total Full-time Faculty	Percentage Business Faculty
<u>Manitoba</u>	<u>51</u>	<u>1,239</u>	<u>4.1</u>
Regina	34	353	9.6
Saskatchewan	44	936	4.7
<u>Sub-total, Saskatchewan</u>	<u>78</u>	<u>1,289</u>	<u>6.0</u>
Alberta	55	1,548	3.6
Calgary (2)	37	933	4.0
<u>Sub-total, Alberta</u>	<u>92</u>	<u>2,481</u>	<u>3.7</u>
British Columbia	94	1,862	5.0
Simon Fraser (2)	22	435	5.1
<u>Sub-total, British Columbia</u>	<u>116</u>	<u>2,297</u>	<u>5.0</u>
Total	1,315	27,037	4.9
Other (5) a) with business faculty	44	2,067	2.1
Institutions b) without	-	2,333	-
Grand Total	1,359	31,437	4.3

- (1) includes secretarial sciences.
- (2) excludes those university teachers who are primarily teaching economics.
- (3) includes also the University of Montreal and Ecole Polytechnique.
- (4) excludes those faculty members who teach public administration.
- (5) some institutions have business faculty members without a program; universities such as Guelph, Waterloo, Winnipeg, Brandon, Lethbridge, and Victoria do not teach commerce and business administration; others are primarily religious institutions

than 50 faculty members and a few had about 100 or more. All together there were that year 1,359 business teachers (excluding those who were primarily teaching economics and public administration). Relating the number of business teachers to total faculty and expressing it in percentage terms, the proportion varied by university from less than 2% for Carleton and Toronto to over 10% (Mount St. Vincent, St. Mary's, Concordia, Ryerson, Wilfrid Laurier). The average for those universities which have a business school was 4.9%, with considerable variation by university (Table 31).

The age distribution of all university teachers is such that, in the near future, there will be very few replacement positions due to retirement or mortality. This situation is even more pronounced for the business faculty where only 32 of 1,372 full-time teachers will reach retirement age of 65 within the next five years (Table 32). Mortality estimates, based on the present age structure, indicate that only about 50 positions will become vacant through deaths. Consequently, assuming net zero mobility, there will be about 15 replacement positions available annually for the next five years, assuming no growth in enrolment.

Only 7.9% of the full-time business teachers are older than 54, compared with 10.6% for all other disciplines. On the other hand, 39.0% are younger than 35, as opposed to 25.4% in other disciplines (Table 32).

Their rank distribution shows that the proportion at the associate professor level has risen from 26.0% in 1968-69 to 29.9% in 1976-77. In the latter year, 17.3% were full professor and 29.8% assistant professors. In relation to the other disciplines, a smaller percentage of business faculty members were full and associate professors (47.2% vs. 58.7%) (Table 33).

Table 34 presents the 1976-77 academic rank distribution of full-time business teachers in 38 universities. Naturally, their relative youth affects their rank. Variations by institution were substantial. For example, at the University of Toronto 60% of the business teachers were at the two senior ranks, compared with fewer than 50% in many other universities.⁽⁸⁾

The legal status of business faculty for 1976-77 shows that 78% of the full-time faculty were Canadian citizens and this figure is almost identical with the total faculty. The only discrepancy exists for holders of employment visa. The business schools have 3.9% in that category compared with 1.7% for the total faculty. In the landed immigrant category therefore the full-time university teachers in business were less (18.1%) in comparison to 20.7% of the total faculty (Table 35).

(8) This table must be interpreted cautiously if the number of university teachers is small.

Table 32

Age Distribution of Full-time University Teachers in Commerce
and Business Administration, 1976-77

Age group	<u>Commerce and Business Administration</u>		<u>All Disciplines</u>
	No.	Percent	Percent
20-24	14	1.0	0.3
25-29	143	10.4	5.5
30-34	379	27.6	19.6
35-39	293	21.4	22.6
40-44	192	14.0	18.1
45-49	150	10.9	13.8
50-54	93	6.8	9.6
55-59	68	5.0	6.2
60-64	32	2.3	3.7
65 and over	8	0.6	0.7
Total Reported	1,372	100.0	100.0
Not Reported	2		
Grand Total	1,374		

Table 33
Percentage Distribution of Full-time University Teachers in Commerce and Business
Administration by Rank, Selected Years

Commerce and Business Administration					
	Full Professors	Associate Professors	Assistant Professors	Lecturers & Instructors	Others
1958-59	19.1	22.1	31.6	19.1	8.1
1963-64	16.7	27.5	41.0	14.9	0.0
1968-69	16.7	26.0	37.3	19.0	1.0
1973-74	16.5	31.0	35.5	13.3	3.6
1976-77	17.3	29.9	29.8	23.0	
All Disciplines					
1958-59	27.5	22.1	28.2	17.2	4.7
1963-64	21.5	24.1	31.8	19.8	2.8
1968-69	19.4	25.4	36.6	16.7	1.8
1973-74	22.1	30.9	33.6	11.3	2.1
1976-77	24.6	34.1	28.4	13.0	

Table 34

Academic Rank Distribution of Full-time University
Teachers by Institution, 1976-77

University	Full Professor	Associate Professor	Assistant Professor	Instructor or Lecturer	Other	Total
Memorial	1 5.0	9 45.0	8 40.0	2 10.0	0 0.0	20 100.0
Prince Edward Island	0 0.0	2 25.0	5 62.5	1 12.5	0 0.0	8 100.0
Acadia	1 8.3	6 50.0	4 33.3	1 8.3	0 0.0	12 100.0
Dalhousie	6 20.0	13 43.3	11 36.7	0 0.0	0 0.0	30 100.0
Mount Saint Vincent	0 0.0	0 0.0	5 35.7	5 35.7	4 28.6	14 100.0
St. Francis Xavier	0 0.0	1 9.1	8 72.7	2 18.2	0 0.0	11 100.0
St. Mary's	3 11.1	9 33.3	12 44.4	3 11.1	0 0.0	27 100.0
Mount Allison	2 33.3	1 16.7	0 0.0	3 50.0	0 0.0	6 100.0
New Brunswick	3 14.3	7 33.3	6 28.6	5 23.8	0 0.0	21 100.0
Moncton	3 12.0	6 24.0	10 40.0	6 24.0	0 0.0	25 100.0
Bishop's	2 33.3	0 0.0	4 66.7	0 0.0	0 0.0	6 100.0
McGill	10 27.0	15 40.5	8 21.6	4 10.8	0 0.0	37 100.0
Concordia	7 10.8	21 32.3	25 38.5	12 18.5	0 0.0	65 100.0
Montreal	3 25.0	4 33.3	4 33.3	1 8.3	0 0.0	12 100.0
Ecole des Hautes Etudes Commerciales	10 18.2	15 27.3	15 27.3	9 16.4	6 10.9	55 100.0
Québec	6 6.9	5 5.7	42 48.3	10 11.5	24 27.6	87 100.0
Laval	16 30.8	14 26.9	16 30.8	6 11.5	0 0.0	52 100.0
Sherbrooke	6 14.3	17 40.5	18 42.8	1 2.4	0 0.0	42 100.0

Table 34 (cont'd)
Academic Rank Distribution of Full-time University
Teachers by Institution, 1976-77

University	Full Professor	Associate Professor	Assistant Professor	Instructor or Lecturer	Other	Total
Carleton	1 8.3	7 58.3	2 16.7	1 8.3	1 8.3	12 100.0
Lakehead	1 7.1	5 35.7	5 35.7	3 21.4	0 0.0	14 100.0
Laurentian	2 12.5	6 37.5	5 31.2	3 18.8	0 0.0	16 100.0
McMaster	6 16.2	11 29.7	16 43.2	4 10.8	0 0.0	37 100.0
Ottawa	4 15.4	10 38.5	9 34.6	2 7.7	1 3.8	26 100.0
Queens	8 19.5	16 39.0	16 39.0	1 2.4	0 0.0	41 100.0
Toronto	16 35.6	11 24.4	10 22.2	2 4.4	6 13.3	45 100.0
Western	17 23.6	15 20.8	17 23.6	13 18.1	10 13.9	72 100.0
Windsor	10 34.5	13 44.8	4 13.8	1 3.4	1 3.4	29 100.0
York	12 30.0	13 32.5	10 25.0	3 7.5	2 5.0	40 100.0
Wilfrid Laurier	4 13.8	7 24.1	12 41.4	6 20.7	0 0.0	29 100.0
Royal Military College	1 50.0	1 50.0	0 0.0	0 0.0	0 0.0	2 100.0
Ryerson Polytechnical Institute	0 0.0	0 0.0	0 0.0	0 0.0	109 100.0	109 100.0
Manitoba	13 25.5	19 37.2	15 29.4	4 7.8	0 0.0	51 100.0
Saskatchewan	12 27.3	19 43.2	8 18.2	2 4.5	3 6.8	44 100.0
Regina	4 11.8	17 50.0	9 26.5	2 5.9	2 5.9	34 100.0
Alberta	17 30.9	29 52.7	3 5.5	0 0.0	6 10.9	55 100.0
Calgary	3 8.1	20 54.1	10 27.0	0 0.0	4 10.8	37 100.0

Table 34 (cont'd)

Academic Rank Distribution of Full-time University
Teachers by Institution, 1976-77

University	Full Professor	Associate Professor	Assistant Professor	Instructor or Lecturer	Other	Total
British Columbia	19 20.2	31 33.0	27 28.7	0 0.0	17 18.1	94 100.0
Simon Fraser	3 13.6	6 27.3	6 27.3	5 22.7	2 9.1	22 100.0
Total	232 17.3	401 29.9	385 28.8	123 9.2	198 14.8	1,339 100.0
All disciplines	24.6	34.2	28.4	13.0		100.0

Table 35

Legal Status of Business Faculty, 1976-77

Legal Status	Business Faculty		Total Faculty	
	No.	%	No.	%
Canadian Citizen	990	78.0	22,367	77.6
Landed Immigrant	230	18.1	5,963	20.7
Employment Visa	49	3.9	502	1.7
Sub-total	1,269	100.0	28,832	100.0
Not Reported	105		2,628	
Total	1,374		31,460	

For new appointments with a doctoral degree the citizenship by country is shown in relation to total business faculty as well as to all faculty. For business schools only 45.6% of the new appointments were Canadian citizens with doctoral degrees. This compares with 59.8% for all new appointments with doctoral qualification. For the stock of business faculty in relation to total faculty stock similar differences exist, 57.7% and 68.4% respectively. This table suggests that Canadian business schools have hired a substantial number of faculty with doctoral qualifications from abroad (Table 36).

Before their university appointment, 44.9% of the full-time faculty were working in the education sector, most at other universities. The comparable figure for all other disciplines is 52.6%. Industry had employed 20.1% of the business teachers, compared with 5.3% for all the other disciplines. Less than a quarter (23.6%) had been graduate students (Table 37).

The lower age structure as well as the more rapid numerical expansion in recent years, might be the reason that the average salary of business teachers was below that in other disciplines. In 1958-59, business faculty made, on average, \$7,136; this increased to \$17,727 in 1973-74 as compared with \$7,492 and \$18,369 for all disciplines. In 1976-77, the average salary of business faculty was closer to the other disciplines (\$24,057 vs. \$24,260) (Table 38).

Table 36

Country of Citizenship of Full-Time New Appointments and Stock
Holding Doctoral Degrees Employed at Canadian Universities, 1976-77

Country of Citizenship	New Appointments				Stock			
	Business Administration		Total		Business Administration		Total	
	Number	%	Number	%	Number	%	Number	%
Canada	26	45.6	320	59.8	635	57.7	12,555	68.4
United States	17	29.8	123	23.0	211	19.2	3,059	16.7
United Kingdom	4	7.0	17	3.2	86	7.8	1,148	6.3
Other Commonwealth	1	1.8	25	4.7	57	5.2	496	2.7
Belgium & France	2	3.5	14	2.6	27	2.5	263	1.4
Other Europe	1	1.8	9	1.7	41	3.7	471	2.6
Other	6	10.5	27	5.0	44	4.0	370	2.0
Total Reported	57	100.0	535	100.0	1,101	100.0	18,362	100.0
Not Reported	2		27		24		420	
Total	59		562		1,125		18,782	

Table 37

Previous Employment of Full-time University Teachers in Commerce
and Business Administration, 1976-77

	<u>Commerce and Business Administration</u>		<u>All Disciplines</u>	
	Number	Percent	Number	Percent
University	460	38.6	12,198	44.2
Other Educational Institutions ...	75	6.3	2,216	8.4
Students (including Post- Doctorals)	281	23.6	6,542	24.9
Health	7	0.6	1,149	4.4
Government (including Military) ..	62	5.2	1,870	7.1
Industry	239	20.1	1,402	5.3
Self-employment and Others	66	5.5	1,460	5.6
Total	1,190	100.0	26,837	100.0
Unknown	184		4,623	
Grand Total	1,374		31,460	

Table 38
Average Salary of Full-time University
Teachers in Commerce and Business Administration,
Selected Years

	Commerce & Business Administration	All Disciplines
		\$
1958-59	7,136	7,492
1963-64	8,128	9,367
1968-69	13,863	13,141
1973-74	17,727	18,369
1976-77	24,057	24,260

The proportion of business administration faculty with doctorates increased from 11.8% in 1958-59 to 39.1% in 1973-74 and to 44.0% in 1976-77 (Table 39). Moreover, teaching qualifications in this field might be a professional degree, such as an Ll.B. or a C.A. with a master's degree. Thus, the increase in the number of teachers with Ph.D.'s indicates a rather substantial improvement in the quality of business faculties, as measured by formal educational attainment, although this percentage was substantially below that of all disciplines (1976-77: 61.7%)(Table 39). Doctoral qualifications of the faculty in some of the larger business schools have been examined for the two years, 1967-68 and 1976-77. The overall figures indicate that the proportion with a Ph.D. increased from 31.8% to 61.6%. In several institutions (McGill, McMaster, York, Alberta, Calgary, British Columbia and Simon Fraser) more than 60% of the business faculty held a doctorate (Table 40).

It is interesting to show for each of the universities the highest type of degree held by the business faculty. As can be expected the large majority (89.4%) held either a master's or a doctoral degree.

As already noted, some business schools now have 60% or more with a doctoral degree. Some of the smaller business schools have also a substantial number of their faculty with doctoral qualifications (Table 41).

Table 39

Doctoral Qualifications of Full-time University Teachers in Commerce and
Business Administration, Selected Years

	Commerce & Business Administration	All Disciplines
	(in percent)	
1958-59	11.8	41.7
1963-64	17.1	43.4
1968-69	25.6	49.4
1973-74	39.1	56.8
1976-77	44.0	61.7

Table 40

Proportion of Full-time Business Faculty
with a Doctoral Degree for Selected
Universities, 1967-68 and 1976-77

	1967-68		1976-77	
	Proportion with Doctorate	Total number	Proportion with Doctorate	Total number
Laval	19.1	47	50.0	52
McGill	71.4	14	66.7	39
McMaster	54.5	11	81.1	37
Queen's	10.5	19	43.9	41
Toronto	22.7	22	46.7	45
Western	46.2	39	56.9	72
Windsor	36.4	11	44.8	29
York	68.4	19	77.5	40
Manitoba	7.1	14	47.1	51
Saskatchewan	15.2	33	52.3	44
Alberta	20.8	24	83.6	55
Calgary	--	n/a	67.6	37
British Columbia	38.9	36	60.6	94
Simon Fraser	--	n/a	68.2	22
Sub-total	31.8	289	61.6	658
Other universities	10.4	183	21.6	725
Total	23.5	472	40.7	1,382

Table 41

Highest Degree Level of Full-time Business Faculty
by University and Province, 1976-77

University	Bachelor's		Master's		Doctorates		Total	
	No.	%	No.	%	No.	%	No.	%
Memorial	0	0.0	12	63.2	7	36.8	19	100.0
Prince Edward Island	0	0.0	5	83.3	1	16.7	6	100.0
Acadia	0	0.0	11	91.7	1	8.3	12	100.0
Dalhousie	3	10.0	14	46.7	13	43.3	30	100.0
Mount St. Vincent	4	33.3	8	66.7	0	0.0	12	100.0
St. Francis Xavier	1	9.1	9	81.8	1	9.1	11	100.0
St. Mary's	5	18.5	10	37.0	12	44.4	27	100.0
Sub-total Nova Scotia	13	14.1	52	56.5	27	29.4	92	100.0
Mount Allison	3	50.0	3	50.0	0	0.0	6	100.0
New Brunswick	2	10.0	10	50.0	8	40.0	20	100.0
Moncton	0	0.0	21	87.5	3	12.5	24	100.0
Sub-total New Brunswick	5	10.0	34	68.0	11	22.0	50	100.0
Bishop's	0	0.0	5	83.3	1	16.7	6	100.0
Concordia	4	6.2	37	56.9	24	36.9	65	100.0
École des Hautes Etudes Commerciales	4	7.3	42	76.4	9	16.4	55	100.0
McGill	4	5.6	8	22.2	26	72.2	26	100.0
Laval	5	10.0	19	38.0	26	52.0	50	100.0
Québec	12	13.8	61	70.1	14	16.1	87	100.0
Sherbrooke	4	9.5	27	64.3	11	26.2	42	100.0
Sub-total Québec	31	9.1	199	58.4	111	32.6	341	100.0
Carleton	1	8.3	5	41.7	6	50.0	12	100.0
Lakehead	1	7.1	13	92.9	0	0.0	14	100.0
Laurentian	0	0.0	11	73.3	4	26.7	15	100.0
McMaster	0	0.0	7	18.9	30	81.1	37	100.0
Ottawa	1	3.8	12	46.2	13	50.0	26	100.0
Queen's	1	2.6	20	51.3	18	46.1	39	100.0
Toronto	3	7.1	18	42.9	21	50.0	42	100.0
Western	17	23.9	13	18.3	41	57.8	71	100.0
Windsor	1	3.5	15	51.7	13	44.8	29	100.0
York	1	2.6	6	15.8	31	81.6	38	100.0
Wilfrid Laurier	2	6.9	17	58.6	10	34.5	29	100.0
Ryerson	42	39.6	58	54.7	6	5.7	106	100.0
Sub-total Ontario	70	15.3	195	42.6	193	42.1	458	100.0

Table 41 (cont'd)

University	Bachelor's		Master's		Doctorates		Total	
	No.	%	No.	%	No.	%	No.	%
Manitoba	3	6.2	21	43.8	24	50.0	48	100.0
Regina	2	6.7	18	60.0	10	33.7	30	100.0
Saskatchewan	3	6.8	18	40.9	23	52.3	44	100.0
Sub-total Saskatchewan	5	6.8	36	48.6	33	44.6	74	100.0
Alberta	1	1.8	8	14.5	46	83.6	55	100.0
Calgary	0	0.0	12	32.4	25	67.6	37	100.0
Sub-total Alberta	1	1.1	20	21.7	71	77.2	92	100.0
British Columbia	9	10.1	23	25.8	57	64.0	89	100.0
Simon Fraser	0	0.0	5	25.0	15	75.0	20	100.0
Sub-total British Columbia	9	8.3	28	25.7	72	66.0	109	100.0
Total	137	10.6	602	46.7	550	42.7	1,289	100.0

Note: a) In addition, there were 35 university business teachers with other qualifications and 5 whose qualifications were unknown.

b) It is likely that some universities have not regularly up-dated their data on qualifications of university teachers; therefore, there probably is a tendency to under-report the highest degree level attained.

The Canada Council has been the major source for leave fellowships, granting an annual total of about 500 to Canadian university teachers. In 1976-77, 16 business school faculty members applied for leave fellowships, tenable the following academic year. The figure for 1974-75 was 23, and 26 for 1975-76. Only about half the applications were successful. Table 42 also shows the percentage of business faculty who applied for leave fellowships. For the seven year period, 1970-71 to 1976-77, an average of fewer than 1% applied, compared with about 4% for all the other human science faculties.

Similar patterns characterize the Canada Council's research grant program. During the seven year period, 139 applications were submitted, 69 or 49.6% of which were successful. The success ratio for the other human sciences was 75%. Throughout these seven years an average of less than 2% of the business teachers applied for a research grant, compared with 7.2% in the other human sciences (Table 43).

Table 42

Leave Fellowships by the Canada Council
for Commerce and Business Administration Faculty,
1970-71 to 1976-77

	Applications	Awards	Success Ratio*	Full-time Business Faculty	Percentage of Business Faculty which Applied	Percentage of Human Science Faculty which Applied**
1970-71	4	1	25.0 (60.7)	712	0.6	1.9
1971-72	2	1	50.0 (60.7)	923	0.2	2.8
1972-73	2	--	0.0 (62.6)	952	0.2	3.2
1973-74	11	4	36.4 (54.1)	1,051	1.0	4.1
1974-75	23	12	52.2 (48.9)	1,227	1.9	4.7
1975-76	26	6	23.1 (41.0)	1,273	2.0	4.8
1976-77	16	4	25.1 (46.8)	1,374	1.2	4.5

** Includes some Post-Doctorals.

* Success ratio for all human sciences in brackets.

Source: Derived from The Canada Council Annual Reports.

Table 43

Research Grants by the Canada Council
for Commerce and Business Administration Faculty,
1970-71 to 1976-77

	Applications	Awards	Success Ratio *	Full-time Business University Teachers	Proportion of Faculty in Commerce and Business Administration of Total	Percentage of Business Faculty which Applied	Percentage of Total Human Sciences Faculty which Applied
1970-71	12	9	75.0 (84.0)	712	5.0	1.7	8.2
1971-72	8	5	62.5 (83.2)	923	5.9	0.9	6.7
1972-73	8	6	75.0 (76.2)	952	6.0	0.8	7.3
1973-74	16	8	50.0 (70.8)	1,051	6.4	1.5	8.1
1974-75	15	4	26.7 (65.6)	1,227	7.2	1.2	8.2
1975-76	42	22	52.4 (68.3)	1,273	7.2	3.3	6.6
1976-77	38	15	37.5 (67.9)	1,374	7.7	2.8	5.2

* Percentage in brackets shows the success ratio for all disciplines in the human sciences (education, fine and applied arts, humanities and social sciences).

Source: Derived from the Annual Reports of the Canada Council.

APPENDIX A

Sources of Data

All of the information, except that relating to the Canada Council, has been derived from the Statistics Canada data file. Some of the data were obtained from the regular historical series and from the various issues of Education in Canada. Other information was generated through special tabulations. For 1976-77, preliminary figures have been utilized, and for the faculty tables for Quebec universities, 1975-76 data have been substituted. In order to have consistency, the definitions and categories used by Statistics Canada have been followed.

The starting dates of the series vary, depending on when the information had become available in such a disaggregate form. Since Statistics Canada does not normally focus on specific disciplines and also does not relate different historical series to each other, this report provides for the first time a comprehensive overview of the data for commerce and business administration, by province and institution.

The study has served as a pilot project for the "Discipline Profile" series which is being developed by Statistics Canada in conjunction with the Social Science Federation of Canada.

